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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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00/687,524 10/12/00 DERNIER

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EXAMINER

IM52/1101

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WASHINGTON DC 20036-3425

JOHNSON, J
ART UNIT

PAPER NUMBER

1725
DATE MAILED:

3

11/01/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/687,524

Applicant(s)

BERNIER ET AL.

Examiner

Jonathan Johnson

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 12-22, 26, and 29-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 23, 24, 27 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-32 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-28 are drawn to a method soldering, classified in class 228, subclass 214.
- II. Claims 29-32 are drawn to a product, classified in class 429, subclass various.

The inventions are distinct, each from the other because of the following reasons:

Inventions Group I and Group II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made with a process that does not involve forming a reaction product.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

**IF APPLICANT ELECTS GROUP I, APPLICANT MUST ADDITIONALLY ELECT
THE FOLLOWING:**

This application contains claims directed to the following patentably distinct species of the claimed invention:

IA. Claims 1-11, 23-25, 27-28 are drawn to a method of protecting.

IB. Claims 12-22 and 26 are drawn to a method of soldering.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

During a telephone conversation with on Burton Amernick a provisional election was made with traverse to prosecute the invention of Group I, claims 1-11, 23-25 and 27-28.

Affirmation of this election must be made by applicant in replying to this Office action. Claims

12-22, 26, and 29-32 are withdrawn from further consideration by the examiner, 37

CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 is indefinite because the claim states that the “complexing agent is selected from the group consisting of...the complexing agent” Examiner recommends applicant clearly specify the complexing agent.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-11, 23-25, and 27-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Henderson et al. (6,217,671). With respect to Claims 1, 3, 5, 10, 11, 25 and 27-28, Henderson et al. teaches providing a solderable surface having a tin oxide thereon (Column 4, Lines 35-45); applying a complexing agent to the solderable surface (Column 4, Lines 55-60);

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forming a reaction product with the tin oxide and the complexing agent, wherein the reaction product decomposes to tin oxide and volatile products upon being exposed to reflow conditions (Column 1, Lines 1-10 and Column 3, lines 35-45 and Column 5, Lines 1-15 and Claims 1 and 2). Since the prior art uses similar organic acids applied to a tin solder, it is the examiner's position that a tin oxide will be formed with similar properties as in the instant application. When the examiner has reason to believe that functional language asserted to be critical for establishing novelty in claimed subject matter may, in fact be an inherent characteristic of the prior art, the burden of proof is shifted to the applicant to prove that the subject matter shown in the prior art does not possess the characteristics relied upon. *In re Fitzgerald et al.* 205 USPQ 594.

With respect to Claim 2, the teachings of Henderson et al. are the same as relied upon in the rejection of Claim 1. Henderson et al. teaches forming a reaction product with tin (Column 4, Lines 35-45).

With respect to Claim 4, the teachings of Henderson et al. are the same as relied upon in the rejection of Claim 1. Henderson et al. teaches forming the reaction product with the tin oxide and the complexing agent comprises heating (Column 5, Lines 1-15).

With respect to Claim 6, the teachings of Henderson et al. are the same as relied upon in the rejection of Claim 1. Henderson et al. teaches the complexing agent comprises pimelic acid (Claim 2).

With respect to Claim 7, the teachings of Henderson et al. are the same as relied upon in the rejection of Claim 1. Henderson et al. teaches the complexing agent comprises a flux (Claim 1).

With respect to Claim 8, the teachings of Henderson et al. are the same as relied upon in the rejection of Claim 1. Henderson et al. teaches the complexing agent comprises sebacic acid (Claim 2).

With respect to Claim 9, the teachings of Henderson et al. are the same as relied upon in the rejection of Claim 1. Henderson et al. teaches the complexing agent consists of complexing agent (Column 3, Line 25-35).

With respect to Claim 23, the teachings of Henderson et al. are the same as relied upon in the rejection of Claim 1. Henderson et al. teaches the complexing agent comprises vapor phase deposition of complexing agent (Column 5, lines 35-55).

With respect to Claim 24, the teachings of Henderson et al. are the same as relied upon in the rejection of Claim 1. Henderson et al. teaches the the complexing agent comprises adipic acid (Claim 2).

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Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Johnson whose telephone number is 703-308-0667.

The examiner can normally be reached on M-Th 7AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 703-308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7718 for regular communications and 703-305-5885 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

jj 
October 30, 2001


TOM DUNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700